

In the claims: The claims are as follows.

1. (Original) A semiconductor component (30) having a silicon-bearing layer (32) and a praseodymium oxide layer (40), characterized in that arranged between the silicon-bearing layer (32) and the praseodymium oxide layer (40) is a mixed oxide layer (34) containing silicon, praseodymium and oxygen, which is of a layer thickness of less than 5 nanometers.
2. (Original) A semiconductor component as set forth in claim 1 wherein the mixed oxide layer (34) is of a layer thickness of a maximum of 3 nanometers.
3. (Previously presented) A semiconductor component as set forth in claim 1 wherein the mixed oxide (34) is a pseudo-binary, non-stoichiometric silicate or an alloy of the type $(\text{Pr}_2\text{O}_3)_x(\text{SiO}_2)_{1-x}$.
4. (Currently amended) A semiconductor component as set forth in claim 3, wherein the mixed oxide (34) is an alloy of the type $(\text{Pr}_2\text{O}_3)_x(\text{SiO}_2)_{1-x}$, and wherein x increases from a first value at an interface of the mixed oxide layer with the silicon-bearing layer (32) to a second value at an interface of the mixed oxide layer with the praseodymium oxide layer (40).
- ~~The mixed oxide layer is a $(\text{Pr}_2\text{O}_3)_x(\text{SiO}_2)_{1-x}$ layer wherein the coefficient x at the interface 36 is of a value 0.3 and at an interface 38 to an adjacent praseodymium oxide layer (Pr_2O_3) 40 it is of a value 1.~~
5. (Previously presented) A semiconductor component as set forth in claim 1 wherein the silicon-bearing layer (32) comprises doped or undoped silicon-germanium.
6. (Previously presented) A semiconductor component as set forth in

claim 1 wherein the silicon-bearing layer comprises doped or undoped silicon.

7. (Previously presented) A semiconductor component 30 as set forth in claim 5 wherein the silicon-germanium layer or the silicon layer has an (001) orientation at the interface to the mixed oxide layer.

8. (Previously presented) An MOSFET as set forth in claim 1.

9. (Previously presented) A memory cell as set forth in claim 1.

10-21. Withdrawn.